Notice of Allowability	Application No.	Applicant(s)	
	09/870,656	KAUFMAN ET AL.	
	Examiner	Art Unit	
	Michael C. Heck	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amendment received 15 Septeber 2005*.

2. ☒ The allowed claim(s) is/are *1-10 and 12-23*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ramraj Soundararajan, Reg. No. 53,832 on 18 November 2005.

The Claims have been amended as follows:

1. (Currently Amended) A system for determining optimal resources based upon client location and resource locations, said system comprising:

a. one or more databases containing dynamic client location data and static resource location data;

b. a cluster detector retrieving dynamic client location data from one or more databases to determine one or more client locations and creating one or more client clusters, each of said client clusters having one or more weights associated with them;

c. a cluster rater receiving said one or more client clusters and outputting one or more weighted clusters;

d. a locator determining one or more resources and retrieving static resource location data from said one or more databases;

e. an optimizer computing at least one optimized resource based upon said weighted clusters and said static resource location data, and

f. a scheduler dynamically scheduling said at least one optimized resource, wherein said system further includes a positioning interface receiving, from one or more remote electronic devices associated with one or more clients, dynamic client location information and saving said dynamic client location information onto said location database.

9. (Currently Amended) A system for determining optimal resources based upon client location and resource locations, as per claim 1, wherein said retrieved dynamic client location data is a set of coordinate data, said coordinate data comprising longitude, latitude, and altitude information.

11. (Cancelled)

14. (Currently Amended) A computer-based method for optimizing resources and dynamically scheduling said resources, said method comprising the steps of:

a. identifying dynamic location coordinates associated with one or more participants, each of said participants associated with a rating;

b. detecting one or more location clusters from said identified dynamic location coordinates, based on proximity of said participants;

c. creating a rated cluster from each of said location clusters, based on said ratings associated with participants within each of said location clusters;

d. calculating a center of mass associated with each of said rated clusters;

e. identifying available resources and retrieving static resource location data from one or more databases;

f. optimizing at least one resource based on said identified resource and said calculated center of mass, and

g. dynamically scheduling said optimized at least one resource.

21. (Currently Amended) An article of manufacture comprising a computer usable medium having computer readable program code embodied therein which optimizes resources and dynamically scheduling said optimized resources, said medium further comprising:

a. computer readable program code identifying dynamic location coordinates associated with one or more participants, each of said participants associated with a rating;

b. computer readable program code detecting one or more location clusters from said identified dynamic location coordinates, based on proximity of said participants;

c. computer readable program code creating a rated cluster from each of said location clusters, based on said ratings associated with participants within each of said location clusters;

d. computer readable program code identifying available resources and retrieving static resource location data from one or more databases;

e. computer readable program code optimizing at least one resource based on said identified resource and said rated clusters, and

f. computer readable program code dynamically scheduling said optimized at least one resource.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael C. Heck whose telephone number is (571) 272-6730. The Examiner can normally be reached Monday thru Friday between the hours of 8:30am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 273-6729.

Any response to this action should be mailed to:

Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Or faxed to:

(571) 273-8300	[Official communications; including After Final communications labeled "**Box AF**"]
(571) 273-6730	[Informal/Draft communication, labeled "**PROPOSED**" or "**DRAFT**"]

MCH
mch
21 November 2005

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

DETAILED ACTION

Response to Amendment

1. The objection to the drawings in the last Office Action has been overcome by the applicant's amendment to the specification.

2. The objection to the specification in the last Office Action has been overcome by the applicant's amendment to the specification.

3. The 35 USC 101 rejection in the last Office Action for claims 14-20 have been overcome by the applicant's amendment to the claims.

REASONS FOR ALLOWANCE

4. Claims 1-10 and 12-23 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The present invention of computer-based method claim 14 with the corresponding claims for a system and an article of manufacture discloses a method for optimizing resources and dynamically scheduling said resources. Specifically, claim 14 discloses identifying dynamic location coordinates associated with one or more participants, each of said participants associated with a rating; detecting one or more location clusters from said identified dynamic location coordinates, based on proximity of said participants; creating a rated cluster from each of said location clusters, based on said ratings associated with participants within each of said location clusters; calculating a center of mass associated with each of said rated clusters; identifying available resources and retrieving static resource location data from one or more

databases; optimizing at least one resource based on said identified resource and said calculated center of mass, and dynamically scheduling said optimized at least one resource. Dynamic location information is where location information is retrieved from remote electronic devices associated with one or more clients through a positioning interface. The closest prior art Bingham et al. (U.S. Patent 6,324,517) teach meeting site selection based on all-inclusive meeting cost. A list of attendees and their corresponding originating locations and quantity of attendees per originating locations are identified. An application server returns a meeting facility list and planners are able to find the lowest cost meeting, therefore optimizing individual costs. Bingham et al. and the prior art of record fail to teach or suggest using dynamic location coordinates associated with one or more participants, detecting one or more location clusters from said identified dynamic location coordinates, creating a rated cluster from each of said location clusters, and calculating a center of mass associated with each of said rated clusters. Bingham et al. (U.S. Patent 6,324,517) in combination with Backhaus (Backhaus, An Engineer's View of Economics: Wilhelm Launhardt's Contributions, Journal of Economic Studies, Vol. 72, Number 4/5, 2000, starting page 424 [DIALOG: file 15]) teach that Launhardt made an original application for the "node theorem" in order to determine the most efficient location of a blast furnace. The blast furnace could be located at either point A, B, or C or it could be located within the triangle ABC. The optimal location of the blast furnace is P. Mechanically, this solution can be demonstrated by attaching weights proportional to the weight to be transported to the points A, B, C. Bingham et al. in combination with Backhaus and the prior art of record

fail to teach or suggest using dynamic location coordinates associated with one or more participants, detecting one or more location clusters from said identified dynamic location coordinates.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Alton (EP 0 717 544 A2) discloses a graphical user interface for multimedia conferencing system that essentially mimics the actions performed in a face-to-face real life meeting.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael C. Heck whose telephone number is (571) 272-6730. The Examiner can normally be reached Monday thru Friday between the hours of 8:30am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 273-6729.

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mch
21 November 2005